

REMARKS

The above-identified patent application was filed under 35 U.S.C. §371, as a U.S. national stage application under the Patent Cooperation Treaty.

In the July 22, 2003 Official Action in this application, restriction was required on the basis that the claimed subject matter allegedly encompasses two (2) separate, patentably distinct inventions, namely a method for extracting nucleic acids from a liquid mixture containing same, as claimed in claims 1-25 (Group I) and a nucleic acid extraction device, as claimed in claims 26-31 (Group II). It is noted that new claim 32 was added by Preliminary Amendment, submitted December 3, 2001. New claim 32 depends from claim 8, and therefore, should have been included with the Group I invention. In view of the present amendments, applicant respectfully traverses this restriction requirement.

In accordance with this amendment, claim 1 has been amended to recite that the method comprises providing a container having a first and second end and containing a solid phase capable of binding nucleic acid and a reversible suction means connected to one of said ends; and operating the reversible suction means to draw the liquid mixture through the solid phase in one direction and force the liquid mixture over the solid phase in the reverse direction so that the nucleic acid in the sample binds to the solid phase. Claim 26 has been similarly amended to characterize the extraction device as comprising a

container having first and second ends and containing a solid phase capable of binding nucleic acid, and reversible suction means which is connected to one of the ends that operates to draw the liquid mixture through the solid phase in one direction and force the liquid through the solid phase in the reverse direction, thereby causing the liquid mixture to pass up and down through the solid phase. Support for this amendment is provided in the present specification at page 1, lines 24-29; page 2, lines 1-5 and page 3, lines 4 and 5. See also, Figures 1-3 and the accompanying description provided at page 10, lines 1-12 and 26-30.

No new matter has been introduced into this application as a result of the present amendment which is plainly supported by the original descriptive text of the international application, as noted above.

Claims 1-32, as now amended, satisfy the unity of invention requirement, in accordance with 37 C.F.R. §1.475, in that there is a technical relationship among the claims which involves the same special technical feature. The special technical feature that is common to all of the claims is the provision of a reversible suction means connected to one end of a container holding a liquid mixture comprising nucleic acid, and the operation of the reversible suction means to draw the liquid mixture through the solid phase in one direction and force the liquid mixture over the solid phase in the reverse direction, so that the nucleic acid bonds to the solid phase. The "Poly(A)

Quik® mRNA Isolation Kit" of Stratagene, to which the Examiner's refers in the July 22, 2003 Official Action is not designed to operate in this manner. See the attached product information for the Poly(A) Quik® mRNA isolation kit obtained from the Stratagene web site. Nor do U.S. Patents Nos. 5,336,412 and 5,378,360 (copies enclosed), which are cited in the aforementioned product information, disclose that the Poly(A) Quik® mRNA isolation kit operates in the manner recited in amended claims 1 and 26. Moreover, the claims, as now amended, are directed to a process and an apparatus or means specifically designed for carrying out such process, as expressly permitted in 37 C.F.R. §1.475 (b)(4).

For the above-stated reasons, it is respectfully requested that the requirement for restriction set forth in the July 22, 2003 Official Action be reconsidered and withdrawn.

In order to be fully responsive, applicants hereby elect the subject matter of Group I (i.e. claims 1-25 and 32) for prosecution in the present application.

Early and favorable action on the merits of this application is respectfully requested.

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Enclosures: Product Information pps. 1-3
U.S. Patents Nos. 5,336,412 and 5,378,360